

FIG. 1

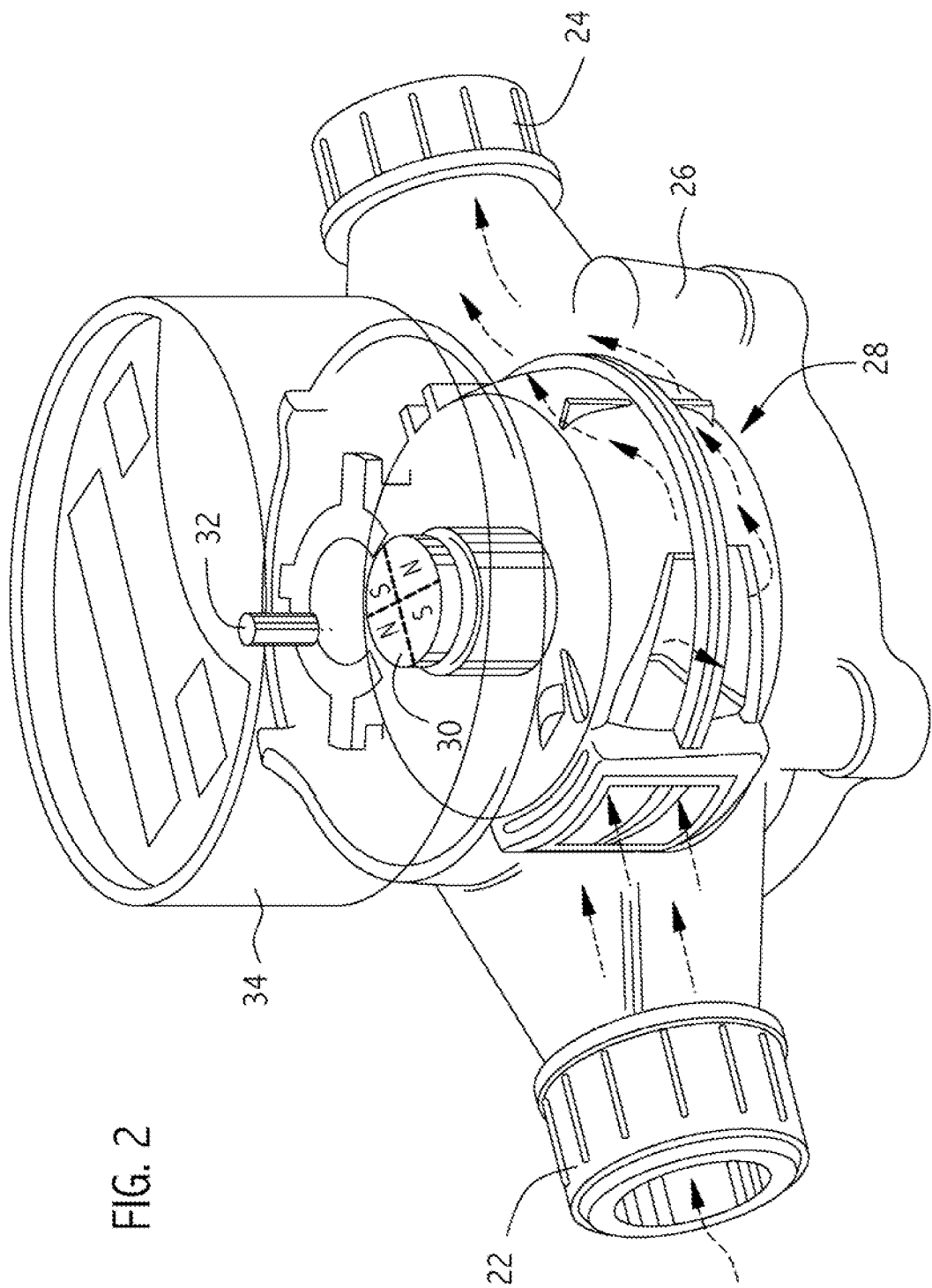


FIG. 2

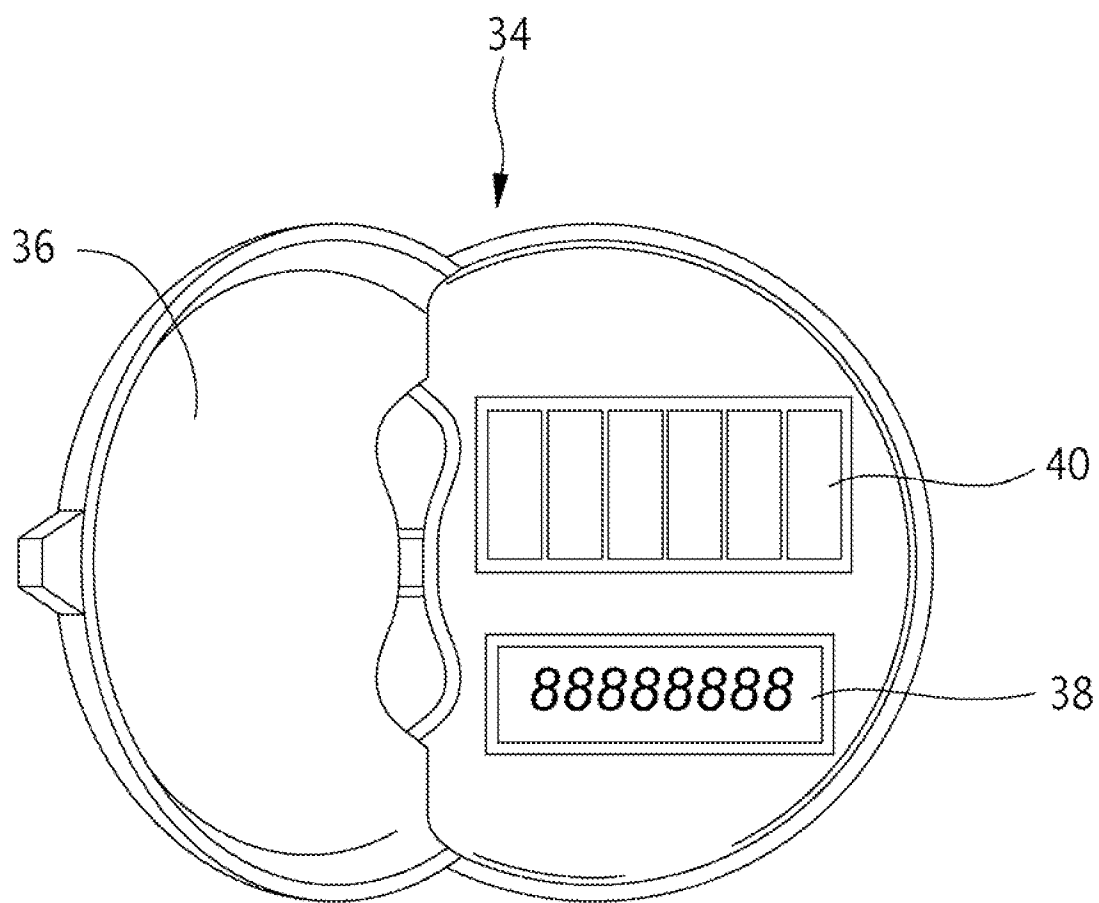


FIG. 3

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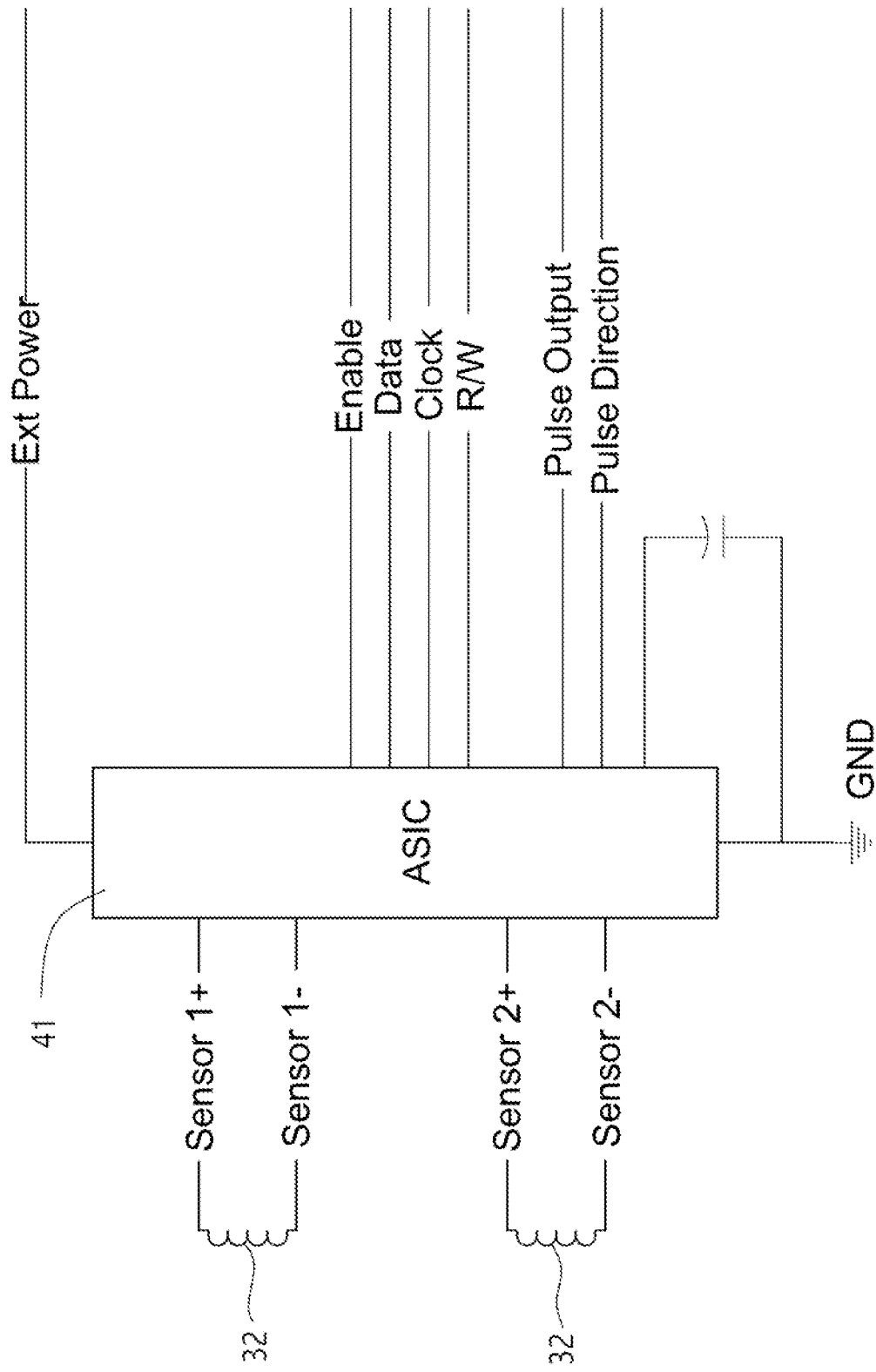


FIG. 4

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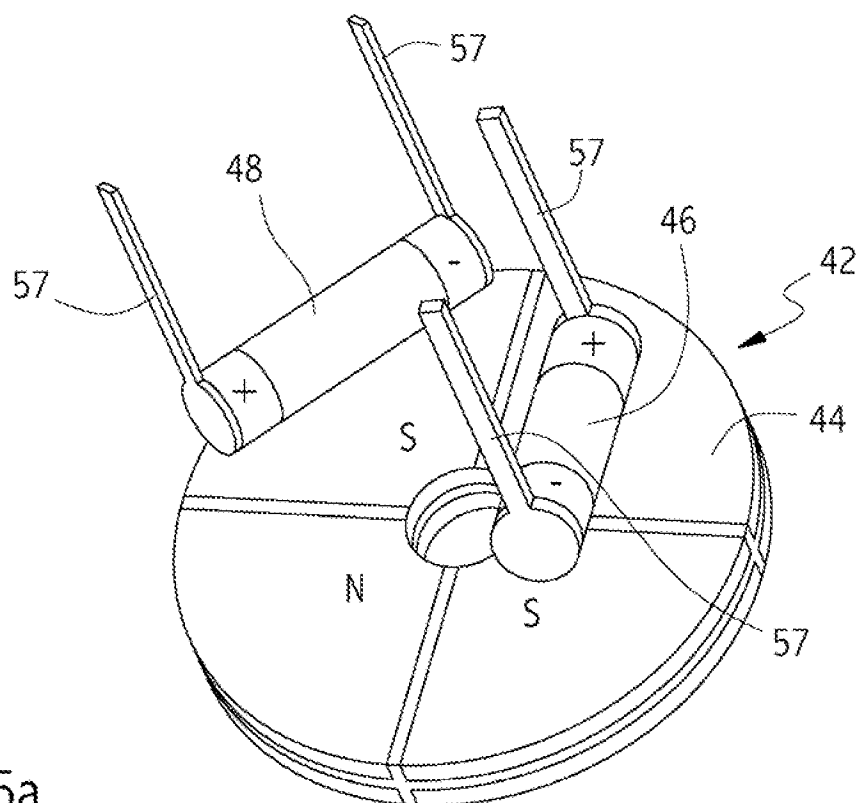


FIG. 5a

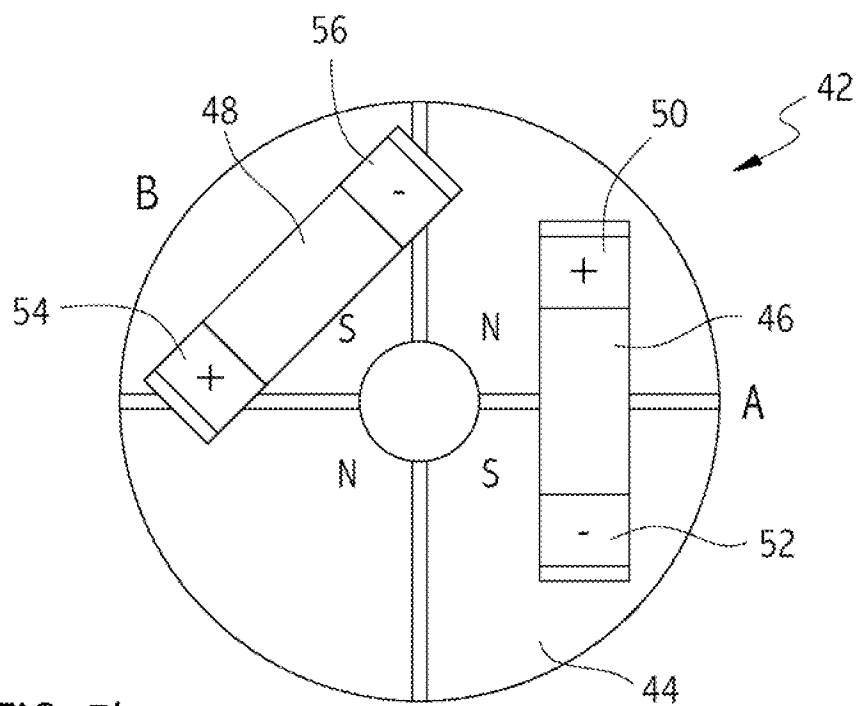


FIG. 5b

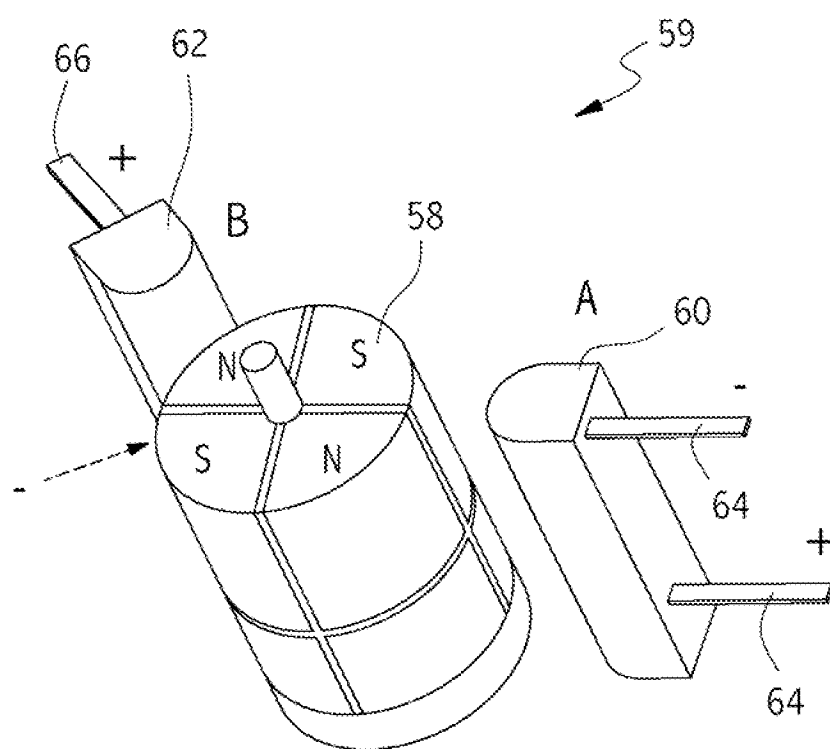


FIG. 6a

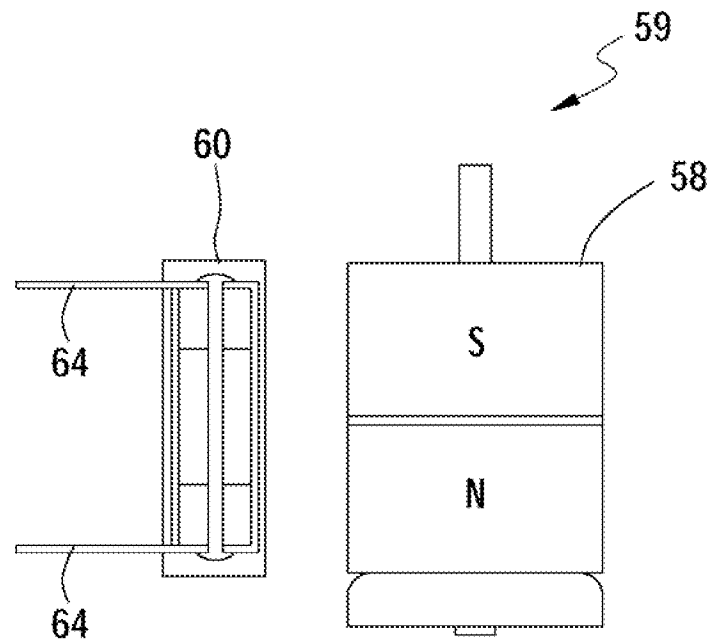


FIG. 6b

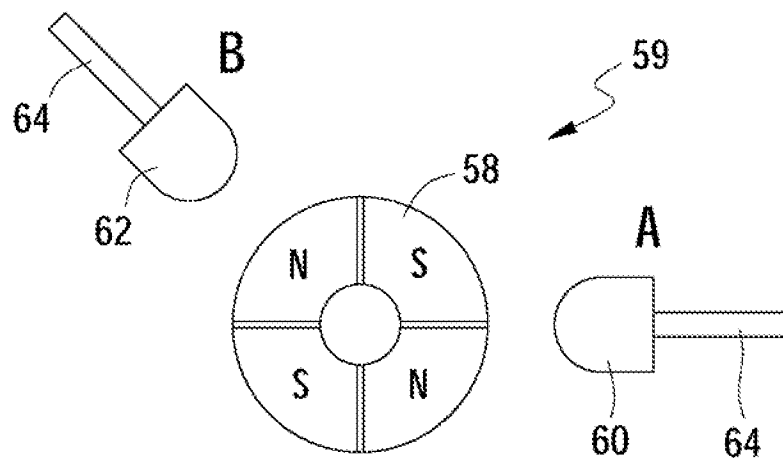


FIG. 6c

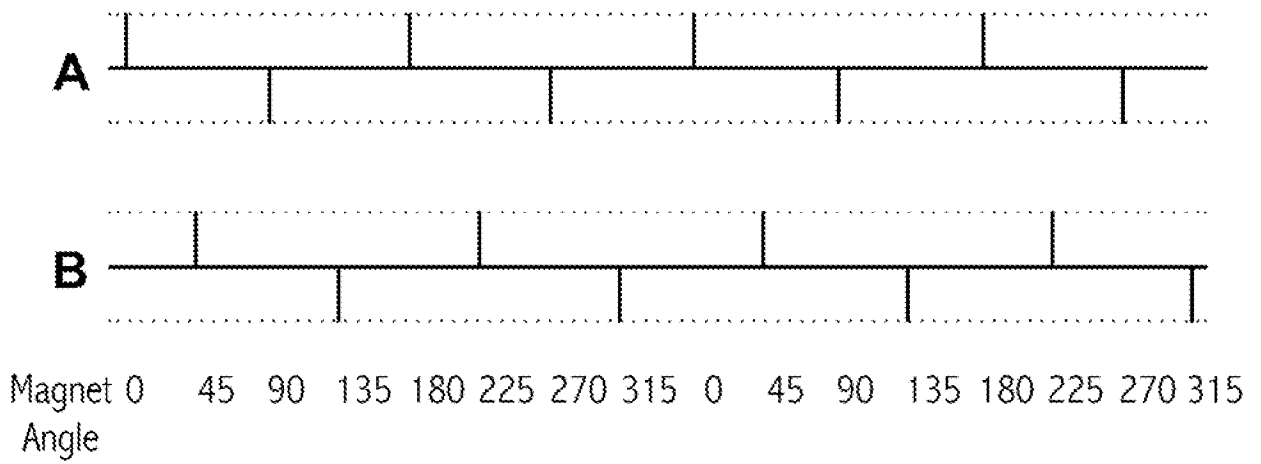
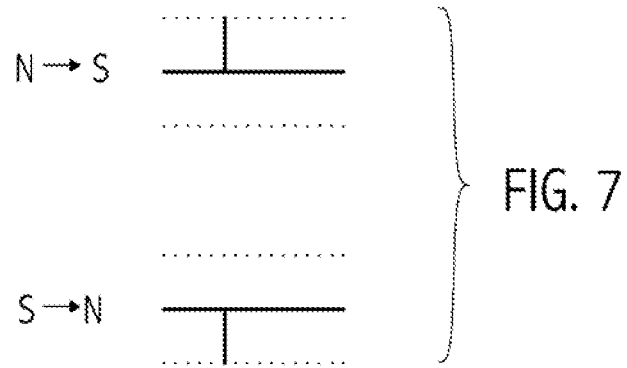


FIG. 8

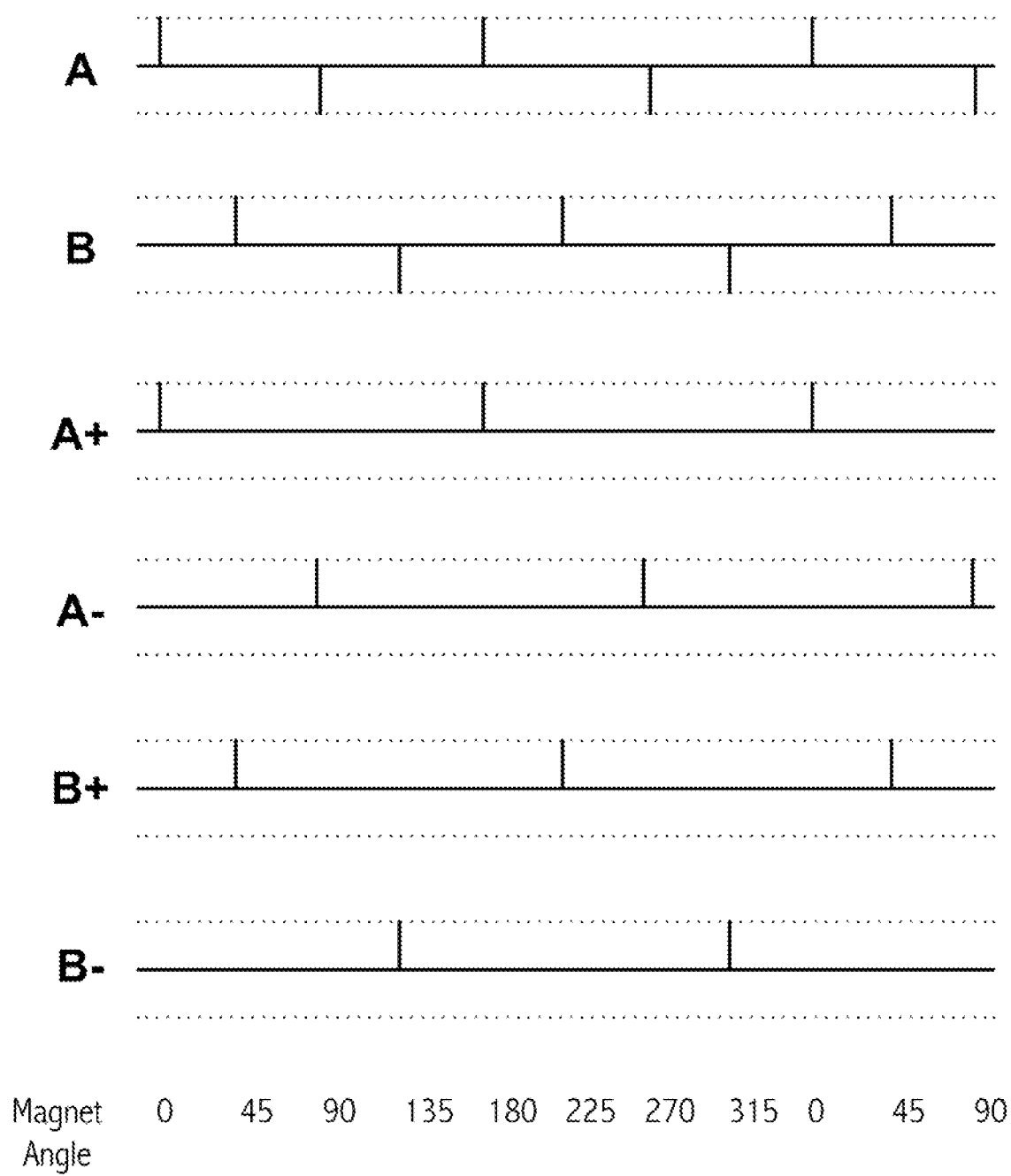


FIG. 9

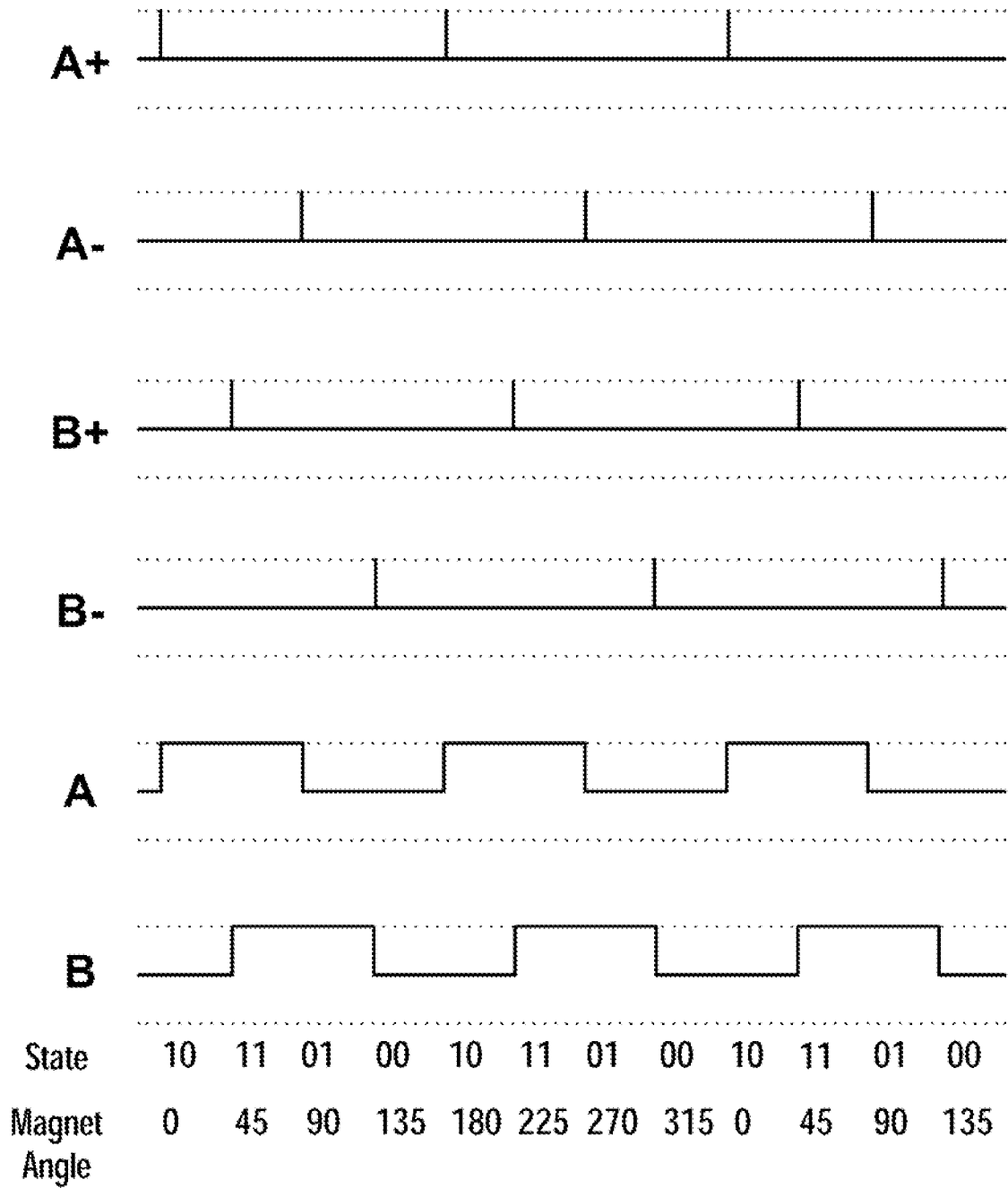


FIG. 10

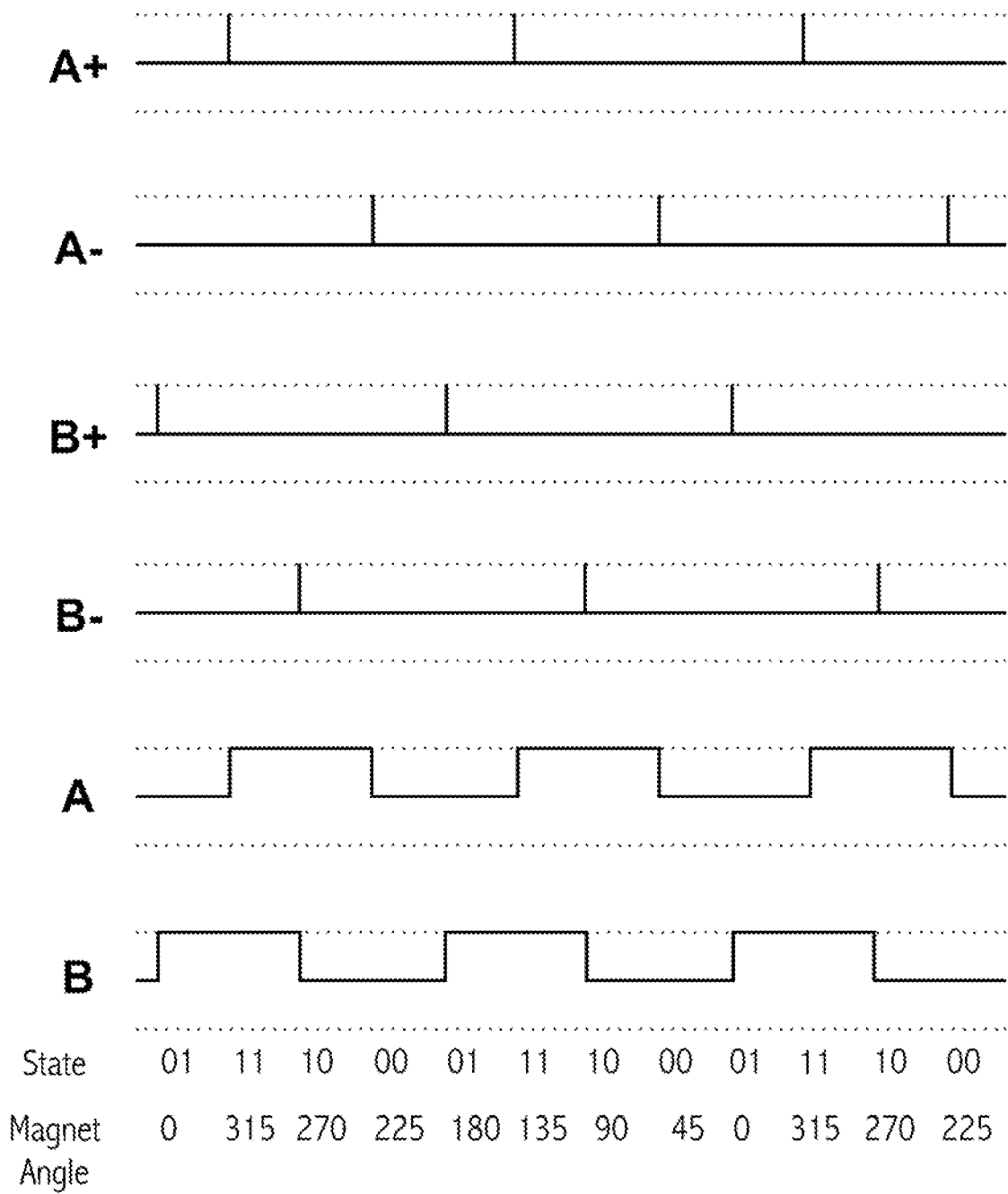


FIG. 11

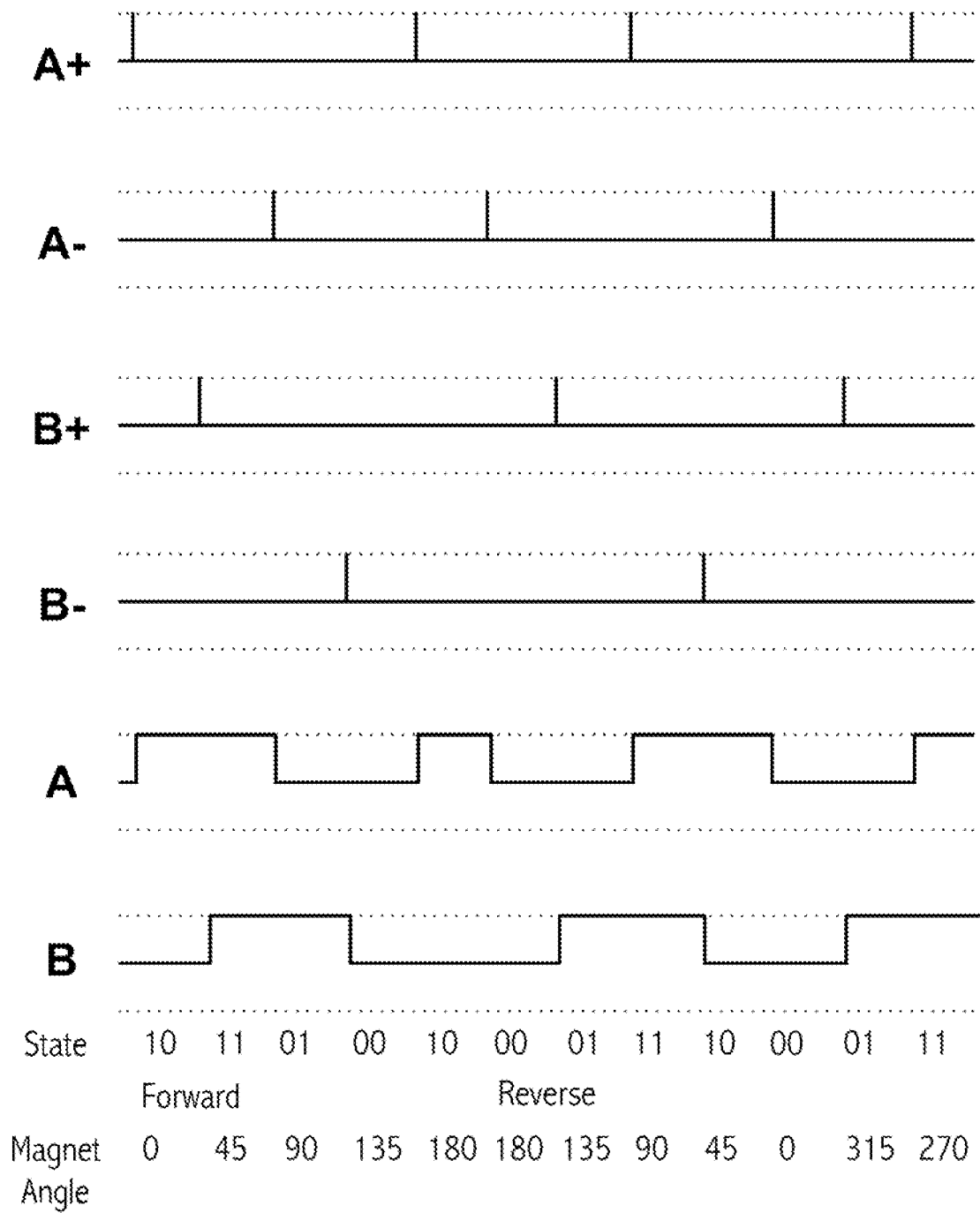


FIG. 12

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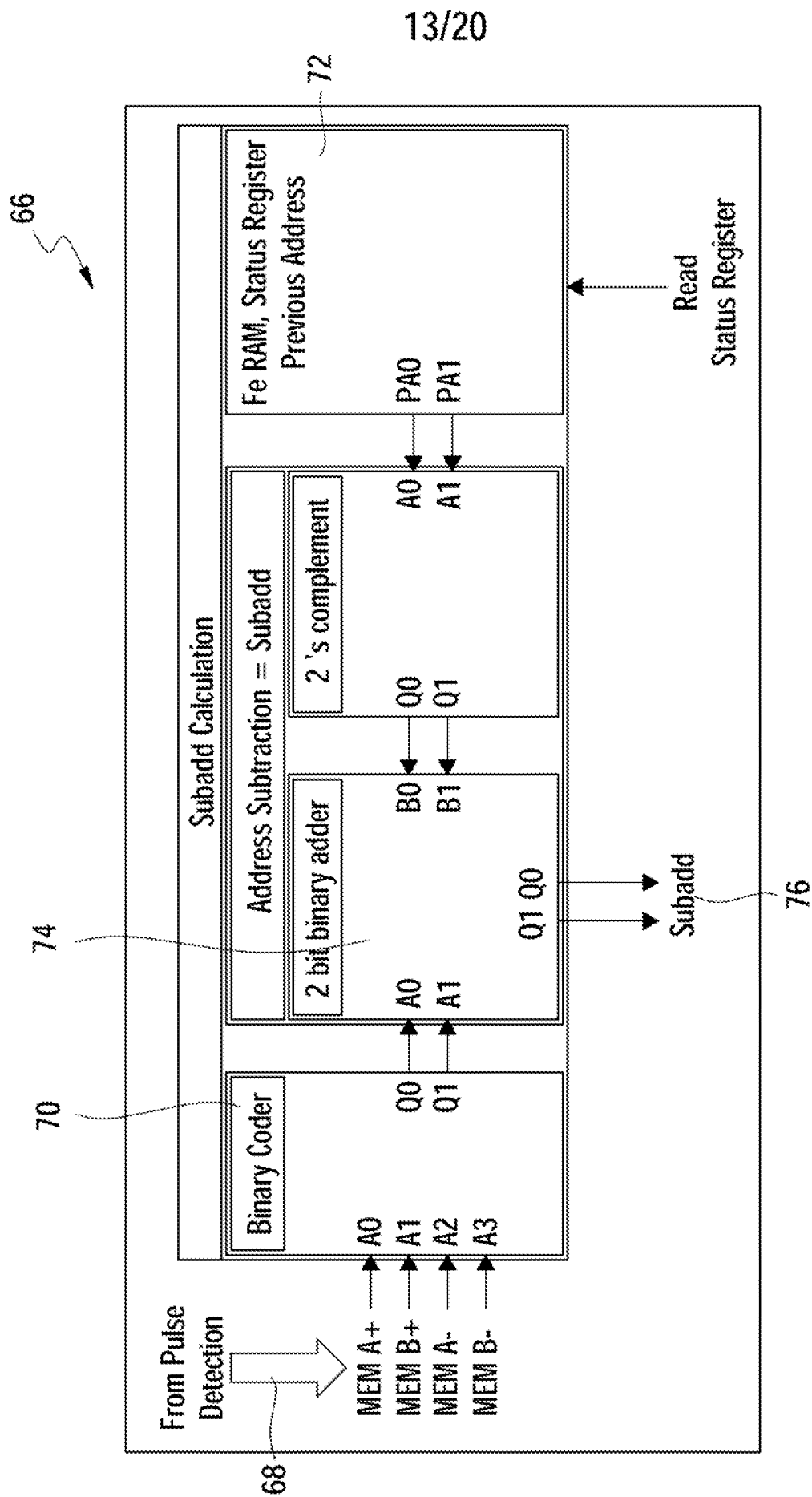


FIG. 13

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Sensor Input	Pulse Detection Output	Flow Direction Input
Sensor A+	MEM A+	A0
Sensor B+	MEM B+	A1
Sensor A-	MEM A-	A2
Sensor B-	MEM B-	A3

FIG. 14a

Tracking	Binary Address NA
Sensor A+	00 <i>(0 decimal)</i>
Sensor B+	01 <i>(1 decimal)</i>
Sensor A-	10 <i>(2 decimal)</i>
Sensor B-	11 <i>(3 decimal)</i>

FIG. 14b

Sensor Input	Binary Address NA
Sensor A+	00 (<i>0 decimal</i>)
Sensor B+	01 (<i>1 decimal</i>)
Sensor A-	10 (<i>2 decimal</i>)
Sensor B-	11 (<i>3 decimal</i>)
Sensor A+	00 (<i>0 decimal</i>)
Sensor B+	01 (<i>1 decimal</i>)
Sensor A-	10 (<i>2 decimal</i>)

FIG. 15a

Sensor Input	Binary Address NA
Sensor A+	00 (<i>0 decimal</i>)
Sensor B-	11 (<i>3 decimal</i>)
Sensor A-	10 (<i>2 decimal</i>)
Sensor B+	01 (<i>1 decimal</i>)
Sensor A+	00 (<i>0 decimal</i>)
Sensor B-	11 (<i>3 decimal</i>)
Sensor A-	10 (<i>2 decimal</i>)

FIG. 15b

Occurring Pulse	New Address NA	Previous Address PA	Subadd
Sensor A+	00	11	$00-11= 01$
Sensor B+	01	00	$01-00= 01$
Sensor A-	10	01	$10-01= 01$
Sensor B-	11	10	$11-10= 01$
Sensor A+	00	11	$00-11= 01$
Sensor B+	01	00	$01-00= 01$
Sensor A-	10	01	$10-01= 01$
Sensor B-	11	10	$11-10= 01$

FIG. 16a

Occurring Pulse	New Address NA	Previous Address PA	Subadd
Sensor A+	00	01	$00-01= 11$
Sensor B-	11	00	$11-00= 11$
Sensor A-	10	11	$10-11= 11$
Sensor B+	01	10	$01-10= 11$
Sensor A+	00	01	$00-01= 11$
Sensor B-	11	00	$11-00= 11$
Sensor A-	10	11	$10-11= 11$
Sensor B+	01	10	$01-10= 11$

FIG. 16b

Pulse	New Address	Previous Address	Subadd
Sensor A+	00		
Sensor B+	Missing	*****	*****
Sensor A-	10	00	10-00= 10
Sensor B+	01		
Sensor A-	Missing	*****	*****
Sensor B-	11	01	11-01= 10
Sensor A-	10		
Sensor B-	Missing	*****	*****
Sensor A+	00	10	00-10= 10
Sensor B-	11		
Sensor A+	Missing	*****	*****
Sensor B+	01	11	01-11= 10

FIG. 17a

Pulse	New Address	Previous Address	Subadd
Sensor A+	00		
Sensor B-	Missing	*****	*****
Sensor A-	10	00	10-00= 10
Sensor B-	11		
Sensor A-	Missing	*****	*****
Sensor B+	01	11	01-11= 10
Sensor A-	10		
Sensor B+	Missing	*****	*****
Sensor A+	00	10	00-10= 10
Sensor B+	01		
Sensor A+	Missing	*****	*****
Sensor B-	11	01	11-01= 10

FIG. 17b

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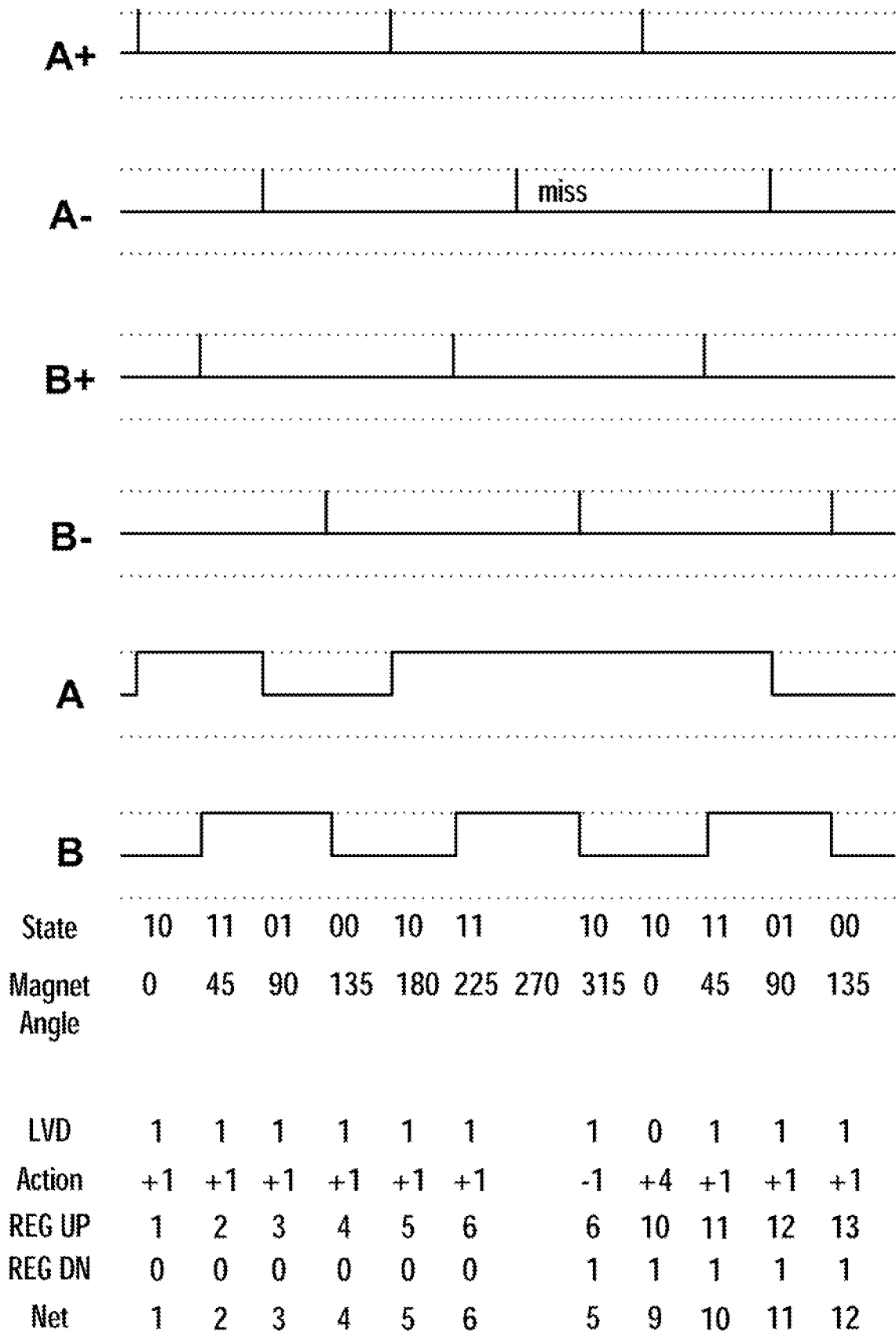


FIG. 18

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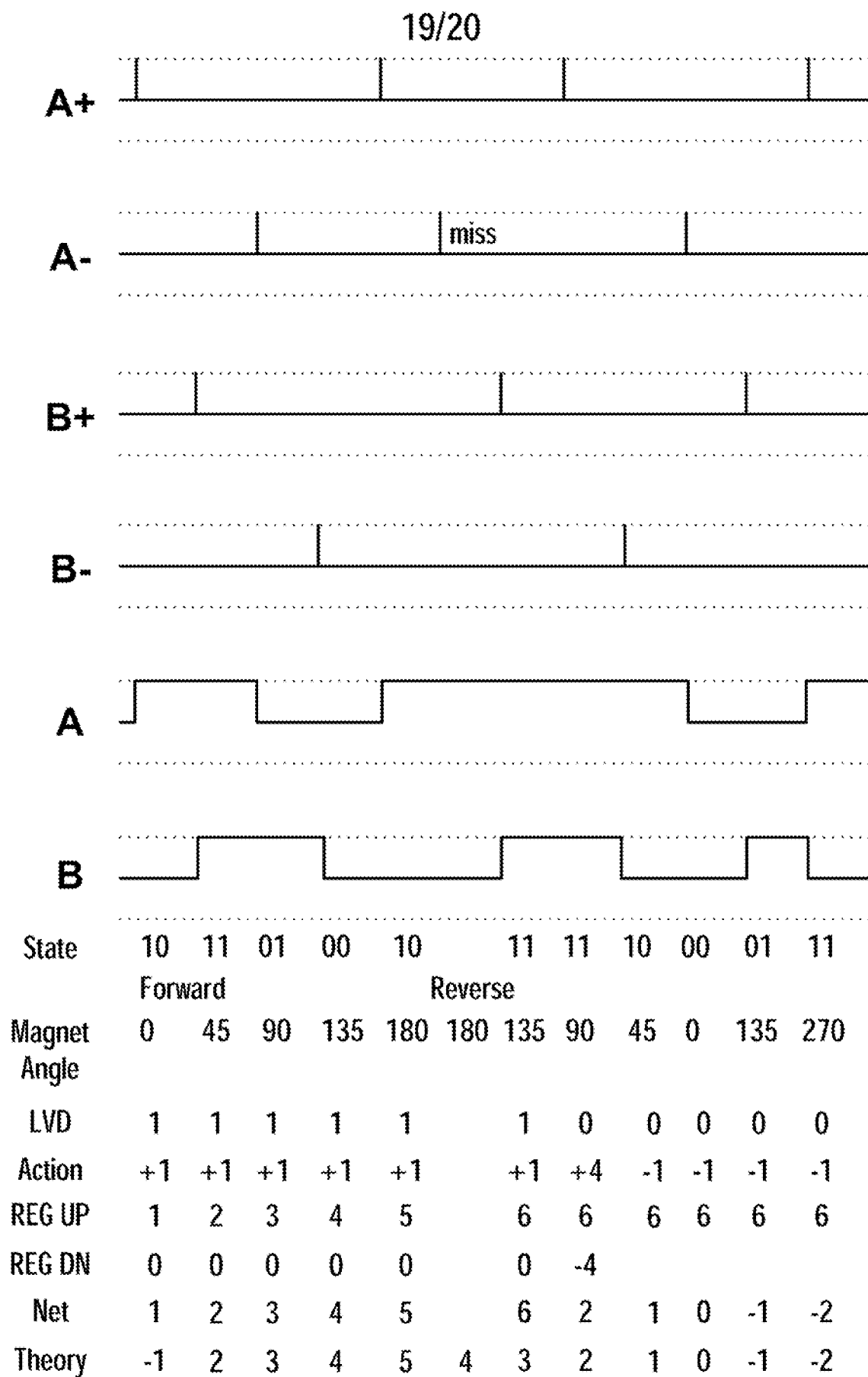


FIG. 19

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FIG. 20

